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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/436,062	11/08/1999	CRAIG W. WARNER	10991087-1	6095

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EXAMINER

FERRIS, DERRICK W

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 12/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/436,062	WARNER, CRAIG W.	
	Examiner Derrick W. Ferris	Art Unit 2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 08 November 1999.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-15 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-15 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 08 November 1999 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____ .
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No., 5,721,819 to Galles et al. ("Galles").

As to **claims 1, 6 and 11**, *Galles* discloses a programmable distributed routing system and method using routing tables for a network in general, and more specifically towards a multi-processor environment [column 1, lines 16-24]. As applicant's invention is also directed towards routing in a multi-processor environment, examiner notes a strong motivation for using the subject matter as a whole for the reference. Using the example shown in figures 16 and 17, examiner notes *Galles* discloses a number of nodes such as a source node (e.g., an originating device 1604), an intermediate node (e.g., router 204c), and a destination node (e.g., target device 1608) [column 18, lines 1-60]. Examiner notes that *Galles* discloses in general using a broad but reasonable interpretation source logic, routing logic, and destination logic (also referred to as path identification means, routing means and destination means) to identify, transmit, route, and detect respectively.

Not clearly shown in the reference is a current hop count with respect to the source logic used to identify a route from source node to destination node that is attached

to a data packet to be transmitted. Examiner notes that it would have been obvious to a skilled artisan prior to applicant's invention, given the teachings *Galles*, to disclose such a hop count in general. Examiner notes that the motivation provided by *Galles* is to keep track of a packet through the network. Examiner directs applicant's attention to figure 17, which indirectly shows the vector fields through each hop along the path to the destination node. For example, the route to the destination must travel through egress ports 2 (for router 204a), 1(for router 204c), 3(for router 204b), and 2 (for router 204e) respectively. Examiner notes that this path has a hop count of four routers (i.e., routers 204a, 204c, 204b, and 204e). Furthermore, examiner notes this hop count is indirectly decremented through the vector packet configuration through each hop to the destination node.

As to **claims 2 and 7**, examiner notes this example also shows a return route path [column 18, lines 62-67; column 19, lines 1-25]. Noted specifically is the source port stored in the vector packet configuration. Examiner also notes a total hop count is shown (see reasoning in rejection for claim 1).

As to **claims 3 and 8**, *Galles* discloses a routing table for each router (including a source node).

As to **claims 4 and 9**, examiner notes the reasoning behind the rejection for claim 1 shows that it would have been obvious to a skilled artisan to decrement the hop count (indirectly).

As to **claims 5 and 10**, *Galles* broadly discloses replacing the destination port with the source port of the intermediate node.

As to **claim 12**, again as mentioned in the rejection for claim 12, it would have been obvious to a skilled artisan prior to applicant's invention to include a total hops value (i.e., same motivation applies). *Galles* also broadly discloses recording at least one source port value in the data packet (for the return path).

As to **claim 13**, *Galles* discloses at least one routing path between source and destination node.

As to **claim 14**, examiner notes that it would have been obvious to a skilled artisan prior to applicant's invention to decrement the current hop count (see the reasoning behind the rejection for claim 11 in that the same motivation applies).

As to **claim 15**, see the reasoning behind the rejection for claim 13. Again, *Galles* broadly discloses an act of replacing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

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Derrick W. Ferris
Examiner
Art Unit 2663

DWF 

December 18, 2002



MELVIN MARCELO
PRIMARY EXAMINER